



The European Institute for the PCB Community

EIPC SPEeDNEWS

The Weekly On-Line Newsletter
Issue 23 – September 2022

NEWS FROM THE EIPC

Programme Technical Snapshot webinar September 14th, 15.00 hrs CET

15:05 CET From Fraunhofer ILT, Jonas Mertin, whose paper is "The fully printed smart component – Combining additive manufacturing and sensor printing"

Abstract: The demand for components with integrated functions, in particular sensors is rising. Printed electronics are increasingly relevant to the large-scale industrialization and commercialization of integrated sensors and functionalities. In addition, 3D printing enables the production of virtually any component. To equip high-value components with printed sensors medium lot sizes, direct printing of functionalities onto a semi-finished or finished component is the most automatable approach to manufacturing. This approach can be used to add various functions to 3D-printed components as well.

15:20 CET From IQ evolution GmbH, Dr. Thomas Ebert will present a paper called "Metal 3D printing, just a tool for prototyping or a serious manufacturing process for mass production?"

Abstract: With metal 3D printing, the smallest structures and cavities can be produced within closed housings, which only have the inlets and outlets as openings. This process has been used to create coolers for power electronics that can dissipate very large amounts of heat in a very small space. In the present case, a strongly turbulent flow is generated inside the cooler. In conjunction with very small wall thicknesses in the range of 150 µm, stainless steel, for example, can be used as a cooler material and yet very high heat flux densities can be safely dissipated.

15:35 CET And finally from ioTech Group Ltd., Dr. Ralph Birnbaum will present a paper entitled "Digital Mass Manufacturing of Electronics - Breaking the Mould"

Abstract: With C.L.A.D. (Continuous Laser Assisted Deposition), a material, evenly coated on a transparent carrier film, passes under a laser. The laser applies a short burst of energy to it. This releases perfectly consistent drops of material onto the substrate below. The material drops can then be sintered or cured inline, in the same machine. A great benefit is that this technology works for solder and polymers as well as for metals and ceramics. Multiple materials can be printed at the same time. This new technology opens the way to new advanced applications and the fabrication of

innovative materials and novel applications. C.L.A.D. systems can work with many materials currently on the market and will be leveraged for any application in the electronics supply chain where one material is applied or bound to another. Material viscosities can exceed 300,000 cPs and fillers of more than 40µm can be added.

15:50 Q&A

May we please invite you to join us, this is free for EIPC members, but for non-members it is just € 50.-.

To ensure your place on this topically important Webinar, register online at www.eipc.org or contact us at eipc@eipc.org



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NEWS FROM AUSTRIA

AT&S appoints Petra Preining as CFO and expands the Management Board

With the appointment of Petra Preining, AT&S will have an excellent CFO to support the Management Board team. As of April 1, 2023, a CTO function will be added to the Management Board. This role will be held by Peter Griehsnig, who has successfully established the AT&S plants in China for many years.

The Supervisory Board of AT&S has appointed Petra Preining (49) to the AT&S Management Board as CFO for a period of five years with effect from October 1, 2022. She will be responsible for Finance, Controlling, Procurement, Investor Relations, Legal, Internal Audit, Compliance as well as Risk and Continuity Management. A graduate in business administration, Petra Preining most recently served as CFO of Semperit AG Holding.

She started her career in the food industry and then worked in the pharmaceutical industry and in business consulting. Since 2016, she served in several senior finance positions for companies of B&C Industrieholding. Petra Preining studied business administration at the Vienna University of Economics and Business.

Peter Griehsnig (57) has been appointed to the Management Board of AT&S for five years and will serve as CTO with effect from April 1, 2023. He will be responsible for Research & Development, Innovation Management, Advanced Interconnect Solution Services (AISS), Quality, ESG and Industrial Planning.

After joining the company in 2001, Peter Griehsnig, who holds a doctorate in physics, has worked for AT&S in Shanghai since 2002. There he made a significant contribution to the design, construction and commissioning of the Shanghai and Chongqing plants in different management positions. In addition, he has been responsible for the performance of the plants as well as the development and implementation of the mSAP technology and the introduction of the technology for substrates in his function as COO of the business unit Mobile Devices & Substrates since 2012.

“We are delighted that Ms. Preining, a highly competent and experienced finance expert, is joining AT&S, and we will continue to successfully pursue our growth path with her support,”

says Hannes Androsch, Chairman of the AT&S Supervisory Board. “With decades of experience, Peter Griehsnig will continue to drive the successful technological positioning of AT&S in his new role as CTO,” Androsch added.

“I am pleased that such experienced and competent professionals as Petra Preining and Peter Griehsnig will strengthen the AT&S Management Board in the future. I am confident that AT&S will successfully address the upcoming challenges as part of the implementation of the corporate strategy with this Management Board team.”

The new Management Board will now consist of the following members: CEO Andreas Gerstenmayer, CSO/Deputy CEO Peter Schneider, COO Ingolf Schröder, CFO Petra Preining and, as of April 1, 2023, CTO Peter Griehsnig.



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NEWS FROM INDIA

Ventec's PCB Base Material Solutions at electronica India

Ventec International Group Co., Ltd. (6672 TT), will be exhibiting at electronica India 2022 at the India Expo Mart in Greater Noida. From 21 to 23 September 2022, visitors to Ventec's booth EP12 in the IPCA Expo area (Hall 12) will be invited to discover the company's unique laminate & prepreg capability across a very wide range of applications and budgets - all supported by a fast and efficient global delivery promise through Ventec's fully controlled and managed global supply chain and world-class dependable technical support. The key focus on Ventec's booth EP12 will be: tec-speed: Ventec's comprehensive and enhanced set of high-performance, high-reliability high-speed/low-loss/high-frequency solutions, including:

tec-speed 30.0 - Ventec's latest ceramic filled high-speed/high-frequency PTFE material range that offers the highest signal-integrity characteristics for the most advanced high-frequency systems such as 77~79 GHz automotive radar systems.

tec-speed 20.0 - Few substrate materials can match the high-speed signal-handling performance of this ceramic-filled hydrocarbon thermoset material series. tec-speed 20.0 combines unrivaled high-frequency performance (Dk 3.00-3.48 / Df 0.002-0.0037), superior loss characteristics and highest reliability particularly demanded by automotive and 5G applications.

tec-speed 6.0 - High-speed, high-frequency material technology for applications requiring great signal integrity and low-Dk benefits with high

reliability. Ventec's material formula also features high Conductive Anodic Filament (CAF) resistance to offer highest assurance of reliability in humid environments.

tec-thermal: Ventec's IMS (Insulated Metal Substrate) families, laminates and prepregs for multilayer PCBs, leverage innovative formulas for excellent thermal performance. Highlights include:

VT-4B5 SP - an aluminium base laminate that ensures maximum thermal efficiency for direct-to-metal connections of electrically isolated heat sources and places dielectric insulation only where needed.

VT-4B5L - a high-performance IMS material that offers excellent solder joint reliability and thermal conductivity of 3.6 W/mK.

autolam: a PCB base material solutions set specifically curated for the diverse and unique requirements of automotive applications. Highlights include:

VT-4B5H - a metal base laminate material with high Tg (180°C) and thermal conductivity of 4.2 W/mK, ideally suited for applications such as LED lighting, power conversion, motor drives and power supply.

VT-4B7 - a high-performance IMS material for applications where maximum thermal conductivity and electrical performance are key. Specified at 7.0 W/mK, VT-4B7 is an affordably priced substrate that competes strongly with direct-bond copper (DBC).

"India is a market with huge growth potential for Ventec. Together with CBC PCB, our distributing partner for India, we're incredibly excited to be exhibiting at electronica India for the first time and can't wait to share our expertise and knowledge with the many visitors to the show," said Chris Hanson, VP IMS Technology.

Ventec International is a world leader in the production of polyimide & high-reliability epoxy laminates and prepregs and a specialist provider of thermal management and IMS solutions. Further information about Ventec's solutions and

the company's wide variety of products is available at www.ventecclaminates.com and/or by downloading the Ventec APP.

Road ahead for boosting electronics manufacturing in India

By [Shipra Dubey](#)

Indian electronics manufacturers must step up their game by evolving and innovating as per the demands of the market and the consumers.

The Indian electronics market, which was estimated to be around \$75 billion last year, is now expected to grow by 6-7% annually for the next six years. This was not the case if one were to assess the situation two years ago. There was a definite dent in manufacturing plants being shut and demands lowering.

However, just like everything gets better with time, so did the electronics industry. The best lesson we all learned from the pandemic was that we need to have in-house manufacturing units. Due to the pandemic and trade being shut, several manufacturers and retailers found it hard to keep up with demand. For instance, semiconductors and panels were so scarce in India that the television industry had months of backlog as parts were not available.

But not anymore. Due to several PLI schemes and the Make-in-India initiative, several plants are being set up for end-to-end manufacturing in India. The Electronics Development Fund policy and the Modified Special Incentive Package Scheme have been introduced to promote manufacturing.

Apart from COVID, there are several reasons behind the increased production in the consumer electronics segment. Global shift in trade policies, the Russia war, work-from-home for corporates, revenge spending, and the US-China face-off, combined together, gave a platform to Indian electronics manufacturers to cater to not just India's needs but also to global manufacturing needs.

WHAT does the road ahead look like?

Increased demand leading to higher production

There is a sudden surge in demand for computers, phones, TV, and kitchen appliances, which is giving a push to manufacturing in India. In a population of 1.3 billion, only 600 million have a smartphone; so there is always scope for new acquisitions and, of course, upgrades in existing ones.

People are buying more consumer electronic products

People now want a better, easy and comfortable lifestyle. With rapid urbanisation, money to spend (increased disposable income), people are spending more on household appliances and definitely mobile phones. Hence, manufacturers certainly have a bright future.

International electronics brands are entering the Indian market

Seeing the huge potential in India, several popular international brands are entering the market. Thus, Indian manufacturers and retailers have a huge opportunity in front of them to partner with these brands and use their technology and brand name with in-house manufacturing.

Government sanctions

The union government has exempted taxes on certain components and parts to promote manufacturing in India. Apart from these, there are export incentives and reduced custom duties on raw material import. Several other measures have been taken to give the Make-in-India plan a boost and promote the manufacturing of electronic items which were earlier imported from other countries and assembled in India.

Developing technology

The transition to 5G, the introduction of artificial intelligence, and the rollout of IoT are definitely driving the demand, as people increasingly adapt to technology. While everything is still in the initial phase, the transition is quick. Hence, Indian manufacturers who enter the segment will definitely gain an advantage.

From the above-mentioned factors, it is clear that, as a country, we should definitely not be dependent on others for finished goods. This is an opportunity of a lifetime, which Indian electronics manufacturers need to grab and step up their game. The entire industry has seen drastic changes due to the constantly changing demands across segments and technologies. The key idea is to keep evolving and innovating as per the consumer and market demands.



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NEWS FROM THE UK

Mid-Term Semiconductor Industry Update Webinar Registration Now Open

Has the chip market boom come to an end? What fate now awaits the industry? Find out the answer to these and other key questions at Future Horizons' IFS2022 Mid-Term Semiconductor Industry Update Webinar, Sep 13, 2022 - 3pm UK BST (GMT+1): <https://www.futurehorizons.com/page/136/Industry-Update-Webinar>

Why? Founded in 1989, Future Horizons' track record and industry experience makes this a must-attend event for key decision makers in the semiconductor, electronics and all related industries. We always present accurate and insightful analysis at these events backed up by sound data

What You Will Learn

This one-hour broadcast will focus on the chip industry outlook, including:

- Has the market boom turned to bust
- What is the market outlook for 2023
- What are the exposures, vulnerabilities, opportunities, losers and gainers
- What will the likely downturn repercussions be
- How to build resilient strategies and business models
- Opportunity to ask specific questions in advance, during and after the webinar.

Who Should Attend?

- All companies, small and large, from startups to established market leaders
- Key decision-makers engaged in the design, manufacture, or supply of semiconductors
- Government organisations involved in trade and investment
- Those involved in investing or banking within the electronics industry
- Senior marketing executives planning future marketing strategy

Why Future Horizons?

We have been in the business of forecasting and analysing the semiconductor

market for over 55 years and have been a trusted advisor to governments, investors and most of the top global semiconductor firms. Time and time again we have delivered sound advice and saved our clients time and money with our forensic and accurate analysis of the industry.

For a small investment of £150 plus £30 UK VAT you will gain accurate industry insight to make good strategic decisions in these uncertain times

- Discount available for 3 or more attendees from the same company/organisation
- Can't attend? Order the webinar material only
- Please pass to a colleague if already attended or not suitable for you
- This event can also be held in-house for your added convenience and flexibility

Sign Up NOW!

Don't miss out, sign up now here:

https://us02web.zoom.us/webinar/register/9216604665338/WN_4vgIAPA9TW6co4WI-z5zRw

Malcolm Penn
Chairman & CEO

Social Media

Follow us on Twitter, like us on Facebook and join our Linked In Group and receive regular industry news, information and comments.

Registered Company: 4380991

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NEWS FROM TAIWAN

Taiwan’s PCB Material makers’ shipment (copper foil, glass cloth & laminates) continues to decline although PCB shipments are still “hanging in there” - Dr. Hayao Nakahara

Taiwan’s PCB Material makers’ shipment (copper foil, glass cloth & laminates) continues to decline although PCB shipments are still “hanging in there”.



As sales of PC, Tablets and Game Consoles, which benefited from strong demand caused by remote work and study, began to see decline, PCBs (HDI, FPC) and IC substrates (CPU, Memory) for these products are decreasing.

Ibiden and Shinko, which are major ICS makers for the CPU for PCs, mentioned in their latest financial reports that their ICS for CPU for these products are negatively affected. However, they say that the reduction of ICS for CPU is compensated by strong demand from data center servers because of the increase of data travel as DX and 5G demand are growing strongly. These ICS are supplied only by a few ICS makers because of technological difficulty.
Naka



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International Diary

2022

EIPC Technical Snapshot Webinar

Registrations via www.eipc.org

14 September

KPCA Korea

21-23 September

Korea

EIPC @ FED Conference

29-30 September

Bamberg, Germany

HDP Fall Member Meeting

12 & 13 October

Rock Hill, South Carolina USA

EIPC Technical Snapshot Webinar

Registrations via www.eipc.org

19 October

TPCA Taiwan

26-28 October

Taiwan

EIPC @ Electronica

15-18 November

Munich, Germany

EIPC Technical Snapshot Webinar

Registrations via www.eipc.org

30 November